

CLASSIFIED MESSAGE

DATE 2256Z 23 JUL 63

~~TOP SECRET~~

ROUTING			
1	DD	4	Dech
2	1	5	"
3		6	DFA
Intel SA/DDR RB			
ROUTINE		50X1	
IN R4445			

TO : DIRECTOR
FROM : KVSPVCTRE
ACTION:
INFO : OSA 1-15

Dech

TOR 2334Z 23 JUL 63

TO BAIL INFO ADIC CITE SPECTRE 0952
CORONA
REF: BAIL 6541

1. A COMPARISON OF THE FOURTH GENERATION POSITIVE TO THE SECOND GENERATION POSITIVE WAS MADE BY SPECTRE PERSONNEL ON NUMEROUS PASSES, COMPARING TARGETS RANGING FROM HIGH TO LOW CONTRAST. A COMPARISON OF HORIZON CAMERA IMAGERY WAS ALSO MADE TO DETERMINE THE SHARPNESS OF THE HORIZON TRACE.

2. FOLLOWING ARE EXAMPLES OF THE TARGETS COMPARED.

A.4 TARGETS WITHIN PANORAMIC FORMAT:

(1) [] - AIRFIELD

50X1

AIRCRAFT PARKED ON THE AIRFIELD APPEAR WELL DEFINED AND NO APPARENT QUALITY DIFFERENCE IS NOTED EXCEPT FOR SLIGHT GRAININESS IN THE FOURTH GENERATION POSITIVE UNDER 7-TIME MAGNIFICATION. USING 27-TIME MAGNIFICATION, THE GRAININESS IN THE FOURTH GENERATION POSITIVE BECOMES VERY APPARENT, AND THE IMAGE QUALITY IS AFFECTED. THE DISTANCE BETWEEN WING TIPS OF THE PARKED AIRCRAFT IS VERY DIFFICULT TO DETERMINE ON THE

DOCUMENT NO. 45
NO CHANGE IN CLASS. ☐
☐ DECLASSIFIED
CLASS. CHANGED TO: TS S
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GROUP 1
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FOURTH GENERATION POSITIVE USING THIS MAGNIFICATION.

(2) [REDACTED] - SHIPPING

50X1

THE FOURTH GENERATION POSITIVE LOSES DETAIL AND IS NOT AS CRISP, ESPECIALLY UNDER 20-TIME MAGNIFICATION.

(3) [REDACTED] - CITY ALONG RIVER

50X1

THE FOURTH GENERATION POSITIVE APPEARS SLIGHTLY HIGHER IN CONTRAST BUT IS GRAINY AND LOSES DETAIL ABOVE 7-TIME MAGNIFICATION.

B. HORIZON CAMERAS:

(1) [REDACTED] - PORT AND STARBOARD HORIZON

50X1

CAMERAS

HORIZON CAMERA IMAGERY IS VERY POOR ON FOURTH GENERATION POSITIVE, LACKING IN CONTRAST AND DETAIL. THE HORIZON TRACE OF THE FOURTH GENERATION POSITIVE IS NOT NEARLY AS WELL DEFINED AS THE SECOND GENERATION POSITIVE.

(2) [REDACTED] - STARBOARD HORIZON CAMERA

50X1

THE FORMAT OF HORIZON CAMERA CANNOT BE DISTINGUISHED ON THE FOURTH GENERATION POSITIVE AND THE FORMAT ON THE SECOND GENERATION IS NOT WELL DEFINED BUT CAN BE DISTINGUISHED.

3. CONCLUSIONS:

THE FOURTH GENERATION POSITIVE, THOUGH HAVING A GENERAL APPEARANCE OF SLIGHTLY HIGHER CONTRAST, DOES NOT PRODUCE IMAGED QUALITY COMPARABLE TO THE SECOND GENERATION POSITIVE. ABOVE 7-TIME MAGNIFICATION, GRAININESS BECOMES VERY APPARENT OF THE

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FOURTH GENERATION POSITIVE, CAUSING LOSS OF DETAIL WHEREAS THE SECOND GENERATION POSITIVES SHOW LITTLE LOSS OF DETAIL AT MAGNIFICATIONS MUCH GREATER THAN 7 TIMES. USE OF MAGNIFICATIONS ABOVE 7 TIMES IS ESSENTIAL IN PI WORK AND MENSURATION ON THIS TYPE OF PHOTOGRAPHY, BECAUSE OF THE SCALE FACTOR. THE FOURTH GENERATION POSITIVE COULD POSSIBLY BE USED IN RAPID SCANNING OR PLOTTING, BUT THE LOSS OF DETAIL WOULD SERIOUSLY HAMPER DETAILED PI WORK, ESPECIALLY MENSURATION.

END OF MESSAGE

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